

ELECTRO-THERMAL SCRATCH DRIVE ACTUATOR

ABSTRACT

A scratch drive actuator (SDA) device comprising a drive shoe and an actuator. The drive shoe has a first drive shoe position and a second drive shoe position and is configured to urge a shuttle from a first shuttle position to a second shuttle position. The actuator is coupled to the drive shoe and is configured to expand and contract in response to exposure to thermal energy, wherein the expansion and contraction of the actuator each urge the drive shoe towards a corresponding one of the first and second drive shoe positions.